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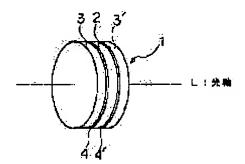
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## (54) ELEMENT FOR OPTICAL ISOLATOR AND ITS PRODUCTION

## (57)Abstract:

PURPOSE: To obtain an element for an optical isolator which has excellent moisture resistance and light resistance, does not generate gases and has high reliability by laminating a Faraday rotator and polarizers via low melting glass layers having transmissivity and fusing fixing both, thereby integrating both.

CONSTITUTION: Flat platelike polarizers 3, 3' are laminated via the low melting glass layers 4, 4' on both surfaces of the flat platelike Faraday rotator 2. The Faraday rotator 2 and the polarizers 3, 3' are fusion fixed by the low melting glass layers 4, 4', by which this element 1 for the optical isolator is integrally formed. The low melting glass layers 4, 4' are preferably composed of a glass material having the high transmissivity to the wavelength of the light to be used and having a m. p. of about 300 to 400° C. The optical surfaces of the respective constituting parts consisting of the Faraday rotator 2 and the polarizers 3, 3' are fixed and integrated by the low melting glass layers 4, 4' having high transmissivity and, therefore, the element for the optical



isolator which does not generate the gases generated in the case of using optical adhesives, has the smaller number of the constituting parts and has the high reliability is realized.

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